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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,005	07/07/2003	Jun Onoshiro	1281.42910X00	4495

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EXAMINER

KOCH, GEORGE R

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 06/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)	
10/613,005	ONOSHIRO ET AL.	
Examiner	Art Unit	
George R. Koch III	1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date, ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date, ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-3, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai (US Patent 5,679,203) in view of Hinton (US Patent 5,643,395).

Sakai discloses an ACF tape feeder machine (see Figures 2, 3, and 4) having ACF tape (item 2 - see column 3, line 42) having an tape bonding means (see item 14) adapted to draw out an ACF tape with an ACF laminated on a liner tape from a supply reel (item 5) set in a feed position at an tape feeding station, and to bond said tape on substrate plate surfaces (see Figure 1, item 1) one after another over a predetermined length, characterized in that said tape feeding station is with a single dispensing reel stand (see Figure 3).

Sakai does not disclose that the tape feeding station is provided with a reel stand having at least two dispensing reel mount members for setting at least two tape supply reels separately thereon; said reel mount members of said reel stand are connected to a switch means and switchable to and from an operating position for reeling out said tape to said bonding means and a standby position.

Hinton discloses a web feeding station which is provided with a reel stand having at least two reel mount members (item 13 and 14) for setting at least two web supply reels separately thereon; said reel mount members of said reel stand are connected to a switch means and switchable to and from an operating position for reeling out said tape to said bonding means and a standby position. Hinton feeds web, or labels, to an operational element. One in the art would immediately recognize that the specific splicing equipment is useful for ensuring a constant supply of web material, which reduces operator involvement and eliminates bonding machine downtime which would

occur if the entire process had to be stopped in order to resupply the tape. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such a splicing, or reel change over, machine in order to reduce operator involvement and reduce downtime.

As to claim 2, Hinton as incorporated discloses an web feeder machine wherein said reel stand includes, for each one of said web supply reels, a reel support shaft (either item 13 or 14) and a tape end holder member (item 46) for temporarily holding a fore end portion of an web reeled out from said supply reel, and a tape handover means (item 43) provided in association with said operating position of said reel stand and adapted to pick up said fore end portion of said web from said web end holder member and hand the same over to said bonding means.

As to claim 3, Hinton as incorporated discloses an splicing machine as defined in claim 2, wherein Hinton also discloses said tape handover means having a handover chuck means (items 45 and 46) adapted to pick up said fore end portion of said ACF tape from said tape end holder member and hand the same over to said chuck member of said bonding means. Sakai does not discloses aid bonding means includes a chuck member (item 46) adapted to grip a fore end portion of said web. However, the additional chucking elements of Hinton function as gripping members. Sakai discloses a bonding roller (item 14) adapted to press said liner tape against a substrate plate, a peeler roller (item 13) adapted to peel off said liner tape from an ACF bonded on said substrate plate.

As to claim 5, Sakai discloses a method for feeding an ACF tape, comprising providing one reel support member with one ACF tape supply reel thereon, while an ACF tape from a supply reel in the perating position is being bonded on the substrate plates by the use of a bonding means (item 14).

Sakai does not discloses a method comprising the steps of; providing at least two reel support members on a reel stand to support and set at least two ACF tape supply reels thereon, one in an operating position for reeling off an ACF tape and the other one in a standby positon; replacing an empty supply reel in said standby position by a fresh ACF tape supply reel; as soon as said ACF tape supply reel in said operating position becomes empty, switching positions of said reel mount members to locate the reel mount member with the fresh ACF tape supply reel in said operating position', and drawing out an ACF tape from said fresh reel and connecting the same to said bonding means.

Hinton discloses a method comprising the steps of; providing at least two reel support members on a reel stand to support and set at least two web supply reels thereon, one in an operating position for reeling off a weband the other fresh web supply reel; as soon as said web supply reel in said operating position becomes empty, switching positions of said reel mount members to locate the reel mount member with the fresh web supply reel in said operating position', and drawing out an web from said fresh reel and connecting the same to said bonding means. One in the art would immediately recognize that the specific splicing equipment is useful for ensuring a constant supply of web material, which reduces operator involvement and eliminates

bonding machine downtime which would occur if the entire process had to be stopped in order to resupply the tape. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such a splicing, or reel change over, machine in order to reduce operator involvement and reduce downtime.

As to claim 6, Hinton as incorporated discloses a method for feeding an ACF tape as defined in claim 5, wherein an empty tape supply reel is replaced by a fresh supply reel manually in said standby position, while a fore end portion of an web a tape supply reel, switched to said operating position, is connected to said bonding means (such as various gripping members 44, 45, 46 and associated substructures) automatically by the use of a tape handover means.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai and Hinton as applied to claims 1-3 above, and further in view of Cairns (US Patent 6,189,587).

As to claim 4, Sakai discloses an ACF tape feeder machine as defined in claim 2, wherein each one reel mount members has a support plate (item 4) adapted to support said reel support shaft and said tape end holder member thereon. Furthermore, Hinton as incorporated disclose multiple supply reels and support structures (see Figure 1). However, neither Sakai or Hinton discloses that said reel stand is connected to a rotational shaft thereby to switch said two reel mount members selectively to and from said operating position and standby position.

Cairns discloses that said reel stand is connected to a rotational shaft (item 18, and see column 4, line 21 to column 4, line 56) thereby to switch said two reel mount members selectively to and from said operating position and standby position. Cairns discloses that the rotation places the new reel into the active position and reduces the amount of intervention needed from the operator (see column 1, lines 62-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such a rotational shaft in order to place the new reel in active position with minimal operator intervention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Koch III whose telephone number is (571) 272-1230 (TDD only). If the applicant cannot make a direct TDD-to-TDD call, the applicant can communicate by calling the Federal Relay Service at 1-800-877-8339 and giving the operator the above TDD number. The examiner can normally be reached on M-Th 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'GRK', with a stylized flourish extending from the end.

GRK
June 9th, 2004

George R. Koch III
Patent Examiner
Art Unit 1734